

### **REMARKS**

The Examiner rejected claim 8 under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. 102 (b) as being anticipated by Stratton et al.

Applicant respectfully addresses the § 112 and 102 (b) rejections with the following arguments and amendments:

#### **After final amendment of the Claims**

The applicant amends the claims to more particularly point out the invention by amending the claims to clarify the element “at or near point of efficiency” found in independent claims 1 and 17. The claims were amended to add the step determining a range of tolerance surrounding the point of efficiency, which is “at or near said point of efficiency.” Furthermore, training within said range of tolerance is also “at or near said point of efficiency,” but not past the point of exhaustion as indicated by the examiner. Therefore, the amendment is both not new matter and has been searched before by the Examiner and thus to advance the application to allowance should be entered in this after final amendment.

**35 U.S.C. § 112**

The Examiner rejected claim 8 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement, asserting “The claim contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.”

Applicant asserts that claim 8 has been amended to remove “a computer program and data”, and respectfully request withdrawal of Examiner’s rejection under 35 U.S.C. § 112, first paragraph.

### 35 U.S.C. § 102

The Examiner rejected claims 1, 4-8, and 17-20 under 35 U.S.C. 102 (b) as being anticipated by Stratton et al. Applicant respectfully disagrees and contends that the disclosure of Stratton et al. does not teach each and every feature of claims 1, 4-8, and 17-20.

The Examiner rejected claim 1 based upon the Stratton publication and the item entitled “Training Program and Maximal Oxygen Consumption.” The training of Stratton consisted of *“6-month training program began at 50% to 60% of heart rate reserve and increased to 80% to 85% by the third-fourth month and continued at that level for the remaining time. The program consisted of walking, jogging, and bicycling for 45 minutes per session, four or five times per week, in a supervised setting. Maximal oxygen consumption was measured using a maximal oxygen consumption was measured using a maximal Bruce treadmill protocol exercise test.”* The Stratton publication is silent regarding testing for “a point of efficiency” and merely teaches exercising at *“50% to 60% of heart rate reserve and increased to 80% to 85% by the third-fourth month and continued at that level for the remaining time.”* The heart rate reserve is a number that is not attributed directly to an individual, but to a general group of the same age and sex.

Regarding claim 17 the Examiner has incorrectly contended that *“during the exercise the heart rate and blood pressure will always be at a point of efficiency and by slowly changing the speed of the machines the subject are at a constant state of accommodation. A subject is not in state in accommodation only when the exhaustion sets in and the subject is unable to keep up with the workload given by the supine exercise machine.”* Applicant respectfully disagrees because this contention is contrary to the specification’s definition and the meanings provided for “point of efficiency” and “state of accommodation.”

Applicant asserts that Stratton et al. do not teach “determining for a given activity a point of efficiency of a trainable subject with respect to at least one parameter” as claimed, *inter alia*, in claim 1. A state of accommodation is “the value at which the physical parameter does not notably change in variation beyond a given functional tolerance”. See specification page 12, lines 19-22. A point of efficiency is a point beyond which the subject’s body and/or emotions and mind, measured through the body, no longer can accommodate additional stress and enters a state of inefficiency causing the physical parameters to vary differently (e.g., more rapidly change, less rapidly change) than before.” Applicant respectfully asserts that a subject is in a state of accommodation only below a point of efficiency, rather than “only when exhaustion sets in” as asserted by the Examiner. Below a point of efficiency, a subject may continue to train for a significant period of time outside of a state of accommodation before exhaustion sets in.

Respectfully, the disclosure of Stratton et al. makes no determination of a point of efficiency for the given exercises, but rather the subjects train at a predetermined percentage of maximum heart rate reserve for 45 minutes (See page 1649, last paragraph, under heading Training Program and Maximal Oxygen Consumption). Stratton et al. is silent with regard to how such a percentage was derived. Radionuclide studies performed in Stratton et al. were used to determine left ventricular volume of subjects during exercise where the speed of a supine bicycle was increased until the subjects reached exhaustion (See paragraph under Study Protocol). Respectfully, no point of efficiency was determined in this portion of the disclosure of Stratton et al. for any of the parameters measured. In addition, the protocol was identical for all subjects which would be contrary to using individual points of efficiency for training each subject.

Since Stratton et al. do not teach “determining for a given activity a point of efficiency of a trainable subject with respect to at least one parameter”, the disclosure of Stratton et al. is likewise silent with respect to “training said trainable subject at or near said point of efficiency with respect to a state of accommodation until a state of inefficiency with respect to said at least one parameter or exhaustion occurs.” as claimed, *inter alia*, in claim 1. As discussed above, the training in Stratton et al. discloses predetermined heart rate targets for a set period of 45 minutes for all subjects. The exercising of a subject at an arbitrary heart rate reserve is a number that is not attributed directly to an individual, but to a general group of the same age and sex and thus unknown if the subject was near the either the “point of efficiency” or “range of tolerance.”

The Stratton publication does not teach further testing to determine either the individual’s “point of efficiency” or “range of tolerance” associated therein and therefore fails to form a prime facie case of anticipation for either claim 1 either before or after amendment. Applicant respectfully requests reconsideration and removal of the anticipation rejection of amended claims 1 and 4-8. Based on the preceding arguments, Applicant respectfully further maintains that the disclosure of Stratton et al. does not anticipate claim 1 even if an amendment after final is not entered, which is amended solely in an attempt to advance the application to allowance since Stratton et al. do not teach each and every feature of claim 1, and that unamended claim 1 is in condition for allowance. Since claims 4-8 depend from claim 1, Applicant contends that claims 4-8 are likewise in condition for allowance.

Applicant respectfully contends that Stratton et al. does not anticipate claim 17 because Stratton does not teach each and every feature of claim 17. Claim 17 claims, *inter alia*, “determining an at least one point of efficiency parameter with respect to a state of accommodation by changing the at least one parameter of the performance system until the at least one parameter of the

subject substantially changes beyond a given tolerance function”. As discussed above, the disclosure of Stratton et al. is silent with respect to determining a point of efficiency. Training disclosed by Stratton et al. is based on a fixed time period for all subjects and a predetermined percentage of maximum heart rate (See page 1649, last paragraph, under heading Training Program and Maximal Oxygen Consumption). Exercises used by Stratton et al. for retrieving cardiac images are based on the same bicycle pedal speed for all subjects to the point of exhaustion, far beyond any point of efficiency. Respectfully, the disclosure of Stratton et al. does not disclose determining any point of efficiency and likewise contains no disclosure of training at or near a point of efficiency. To attempt to advance the application to allowance claim 17 is amended to point out that claim 17 is amended to add the step determining a range of tolerance surrounding the point of efficiency, which is “at or near said point of efficiency.” Furthermore, training within said range of tolerance is also “at or near said point of efficiency,” but not past the point of exhaustion as indicated by the examiner.

Based on the preceding arguments, Applicant respectfully maintains that Stratton does not anticipate claim 17 either before or after amendment and that claim 17 is in condition for allowance even if the amendment is not entered. Since claims 18-20 depend from claim 17, Applicant contends that claims 18-20 are likewise in condition for allowance.

## CONCLUSION

Based on the preceding arguments, Applicant respectfully believes that all pending claims and the entire application meet the acceptance criteria for allowance and therefore request favorable action. If the Examiner believes that anything further would be helpful to place the application in better condition for allowance, Applicant invites the Examiner to contact Applicant's representative at the telephone number listed below. The Director is hereby authorized to charge and/or credit Deposit Account 19-0513.

Date: December 21, 2007

/Jeffrey D. Washville/

Jeffrey D. Washville  
Registration No. 58,108  
Customer No. 5409  
Schmeiser, Olsen & Watts  
22 Century Hill Drive, Suite 302  
Latham, New York 12110  
(518) 220-1850